

REMARKS

This is responsive to the Office Action mailed on August 1, 2006.

Claims 13-17 and 30-35 stand withdrawn as being drawn to non-elected inventions. To facilitate a Notice of Allowance, claims 13-17 and 30-35 are hereby cancelled reserving the right to pursue such claims in a divisional application. Also with this amendment, independent claims 1, 8, 18, 25, 36 and 40 are hereby amended, along with claims 2, 4, 19 and 37 being cancelled.

In the Office Action, claims 1, 3, 5-7, 18, 36 and 40-42 were rejected under 35 U.S.C. § 112, first paragraph alleging that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor at the time that the application was filed had possession of the claimed invention.

Independent claims 1, 8, 18, 36 and 40 are hereby amended to specifically identify *Streptococcus bovis* or *Lactobacillus*, spp. as the two bacterium of interest. In connection with this amendment, claims 2, 4, 19 and 37 have been cancelled. It is respectfully requested that the rejection under claims 1, 3, 5-7, 18, 36 and 40-42 under 35 U.S.C. § 112, first paragraph, be withdrawn.

The Office Action again objected to the disclosure because of the informality on page 20, paragraph 61 of the application. The replacement paragraph provided in the previous response contains the typographical error “2501  $\mu$ l”. This has been changed in the replacement paragraph provided with this response to “250  $\mu$ l”.

Next, the Office Action rejected claims 1, 3 and 18 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,491,926 to Kodama et al. It is believed that with the amendment to independent claims 1 and 18, claims 1, 3 and 18 are no longer anticipated by the Kodama et al. patent. The Kodama et al. patent describes *H pylori*. *H pylori* is not a lactic acid producing bacteria. It is well known that *H pylori* does not produce lactic acid but instead secretes an enzyme that neutralizes acid. If *H pylori* would produce lactic acid, it would work against its own survival. Furthermore, the antibodies described in Kodama et al. are antibodies to the urease of *H pylori* and to the flagella of *H pylori*. A lactic acid bacteria is also used to inhibit *H pylori* growth in the stomach since *H pylori* is adverse to lactic acid. As amended, independent

claims 1 and 18 define the production of antibodies to adhesion antigens of *Streptococcus bovis* or *Lactobacillus* spp. bacteria. In view of this, it is requested that the rejection of claims 1, 3 and 18 under 35 U.S.C. § 102(e) be withdrawn and these claims allowed.

Next, the Office Action rejected claims 1-4, 8-9, 18-21, 25-26, 36-37 and 40 under 35 U.S.C. § 103(a) as being unpatentable over the Tokoro U.S. Patent No. 5,080,895 in view of the Gill et al. U.S. Patent No. 6,287,555. The Office Action alleges that the Tokoro patent teaches a method of producing a microbial adherence inhibitor. Applicant's attorney has carefully reviewed the '895 patent and can find no reference to stimulation or targeting of adherens of *E Coli*. Independent claims 1, 8, 25, 36 and 40 have all been amended to state that the *Streptococcus bovis* or *Lactobacillus* spp. bacteria have their adherens stimulated such that antibodies are produced against it. Support for this can be found in the published patent application in paragraphs 0052 and 0053.

In contrast, the '895 patent is directed to the prevention of diarrhea caused by *E Coli* and specifically Enterotoxigenic *E Coli*. Such *E Coli* reside near the rectum and produce toxins that result in the host having diarrhea. Although the Office Action refers to specific sections in the '895 patent claiming mention of "adherence", applicant's attorney has carefully reviewed these sections and the entire '895 patent, and can find no reference to targeting of "adherens", to prevent adherence. It is well known that *E Coli*, can exist in feces without adhesion. Irrespective of that fact, the antibodies produced by the process disclosed in the '895 patent appear to be against the bacteria as a whole. There is absolutely no mention in the '895 patent of directing antibodies specifically against adhesion antigens.

In view of the above, and in view of the amendment to the claims, it is respectfully requested that the rejection of claim 1-4, 8-9, 18-21, 25-26, 36-37 and 40 be withdrawn and these claims allowed.

The Office Action also rejected dependent claims 5-7, 10-12, 22-24, 27-29, 38-39, and 41-42 under 35 U.S.C. § 103(a) as being unpatentable over the Tokoro U.S. patent ('895) in view of Gill et al. ('555) and in further view of the Stoll et al. U.S. Patent No. 4,748,018, the Parish et al. U.S. Patent No. 3,878,298 and the Betz et al. U.S. Patent No. 4,166,867.

For the same reasons as discussed above with respect to claims 1-4, 8-9, 18-21, 25-26, 36-37 and 40, dependent claims 5-7, 10-12, 22-24, 27-29, 38-39 and 41-42 are not obvious. Reconsideration and allowance of claims 5-7, 10-12, 22-24, 27-29, 38-39 and 41-42 are respectfully requested.

Lastly, the Office Action rejected claims 1-40 under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Office Action said that "bacteria" in claim 1, lines 6 is inconsistent with "bacterium" in claim 1, line 9. Claim 1 has been amended in line 9, by amending line 9 to include the word "bacteria".

The Office Action also state that "bacteria" in claim 40 is inconsistent with the word "immunogen" in claim 40, lines 3 and 4. All reference to immunogen in claim 40 has been deleted and the word "bacteria" substituted therefore.

In view of the above, it is respectfully requested that all of the claims be reconsidered and allowed.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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